

SECTION 02610 – DRAINAGE PIPE

PART 1 – GENERAL

1.01 SECTION INCLUDES:

- A. Steel and reinforced concrete pipe, joints and accessories.

1.02 RELATED SECTIONS:

- A. Section 02300 - Earthwork.

1.03 REFERENCES:

- A. AASHTO M170 (ASTM C76) - Reinforced concrete culvert, storm drain and sewer pipe.
- B. AASHTO M198 (ASTM C443) - Joints for circular concrete sewer and culvert pipe, using rubber gaskets.
- C. ASTM A53 – Specification for Pipe, Steel, Black and Hot-Dipped Zinc-Coated, Welded and Seamless.
- D. Kansas Department of Transportation (KDOT), Standard Specifications for State Road and Bridge Construction - latest issue.

1.04 SUBMITTALS:

- A. Product Data: Provide data on pipe, fittings and accessories.

PART 2 – PRODUCTS

2.01 PIPE:

- A. Corrugated HDPE Pipe: ASTM F 2648, dual wall, corrugated, ADS N12 or equal.
- B. Reinforced Concrete Pipe: AASHTO M170, Class III.
- C. Reinforced Concrete Pipe Joint: AASHTO M198, rubber compression gasket joint or mastic joint sealant.

2.02 BEDDING AND BACKFILL:

- A. Bedding: Crushed rock as specified in Section 02200.
- B. Backfill: Soil material as specified in Section 02200.

2.03 ACCESSORIES:

- A. Fill at Pipe Ends: Riprap as specified in Section 02200.

PART 3 – EXECUTION

3.01 EXAMINATION:

- A. Verify that excavation base is ready to receive work and excavations, dimensions, and elevations are as indicated on drawings.

3.02 PREPARATION:

- A. Remove large stones or other hard matter which could damage piping or impede consistent backfilling or compaction.

3.03 BEDDING:

- A. Place bedding in accordance with Section 02200.
- B. Backfill around and over pipe with fill, tamped in place and compacted in accordance with Section 02200.

3.04 INSTALLATION - PIPE

- A. Install pipe and accessories in accordance with manufacturer's instructions.
- B. Lift or roll pipe into position. Do not drop or drag pipe over prepared bedding.
- C. Expose the groove end of the pipe sections at inlet openings to produce a rounded and more efficient entrance.
- D. Shore pipe to required position; retain in place until after compaction of adjacent fills. Ensure pipe remains in correct position and to required slope.
- E. Lay pipe to slope gradients noted on drawings.
- F. Grout lifting holes closed in reinforced concrete pipe sections.
- G. Repair any surface damage to pipe.

3.05 FILL AT PIPE ENDS

- A. Place riprap at pipe ends where indicated on drawings. Riprap to be placed in accordance with Section 02200.

3.06 FIELD QUALITY CONTROL

- A. Request inspection prior to placing cover over pipe.
- B. Compaction testing will be performed in accordance with Section 02200.

- - END OF SECTION - -